

# Web Site Content and Usability Assessment Criteria by Grade Level

| CRITERIA                                                                                                           | K                                                                                                                                     | 5                                                                                                                     | 9                                                                                                                                                                                                                                                                                                 | 12                                                                                                                                                                                                                                                                                                                 |                                                                      |
|--------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| 1. Content Sophistication                                                                                          | <div>Content:<br/>Simple<br/>Concrete<br/>Experiential<br/>Observational<br/>Local</div>                                              | <div>Illustrations:<br/>Characteristics<br/>Similarities<br/>Differences<br/>Change<br/>Constancy<br/>Groupings</div> | <div>Illustrations:<br/>Creative thinking<br/>Relationships<br/>Investigation<br/>Responsibilities<br/>Societal impacts<br/>Classification<br/>Risks/benefits</div> <div>Ecosystem<br/>Equilibrium<br/>Variation<br/>Hierarchy<br/>Uncertainty<br/>Spatial/temporal extension<br/>Synthesis</div> | <div>Illustrations:<br/>Analytical investigation<br/>Sophisticated technology<br/>Logic and reasoning<br/>Analytical evaluation<br/>Analytical compounds<br/>(e.g., biochemistry interdependencies, chemical reactions)</div> <div>Content:<br/>Complex<br/>Abstract<br/>Analytical<br/>Synthetic<br/>Global</div> |                                                                      |
| 2. Linkages to Other Topics                                                                                        | Single topic discussions                                                                                                              |                                                                                                                       | Linkages to related issues<br>(e.g., ethical responsibility<br>government action)                                                                                                                                                                                                                 | Complex, synthetic linkages<br>(e.g., cost-benefit studies;<br>watershed management)                                                                                                                                                                                                                               |                                                                      |
| 3. Purpose                                                                                                         | "Edutainment"                                                                                                                         | Homework                                                                                                              | "Edutainment"                                                                                                                                                                                                                                                                                     | Homework                                                                                                                                                                                                                                                                                                           | Research                                                             |
| 4. Reading Level                                                                                                   | Gunning Fog Analysis (see instruction sheet)                                                                                          |                                                                                                                       |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                    |                                                                      |
| 5. Narrative                                                                                                       | Labels<br>Simple definitions<br>Graphical adjuncts<br>No jargon or acronyms<br>Difficult terms should be clickable to find definition |                                                                                                                       | Extended narrative and use of<br>narrative coherent devices<br>(e.g., reference, footnotes)<br>No undefined jargon or acronyms<br>Technical terms defined                                                                                                                                         |                                                                                                                                                                                                                                                                                                                    |                                                                      |
| 6. Graphical Typology                                                                                              | Pictures<br>Animation                                                                                                                 | Simple bar graphs,<br>pie charts, line<br>graphs, maps                                                                | More complex pictures, charts,<br>tables, plots, graphs                                                                                                                                                                                                                                           | Multi-variable<br>overlays                                                                                                                                                                                                                                                                                         | Complex<br>mathematical<br>graphing                                  |
| 7. Ratio of Graphic/<br>Narrative Space                                                                            | <div>Graphic<br/>↓<br/>High</div> <div>Narrative<br/>↓<br/>Low</div>                                                                  | Simple graphics<br>and narrative                                                                                      | <div>Graphic<br/>↓<br/>Medium</div> <div>Narrative<br/>↓<br/>Medium</div>                                                                                                                                                                                                                         | Complex graphics<br>and narrative                                                                                                                                                                                                                                                                                  | <div>Graphic<br/>↓<br/>Low</div> <div>Narrative<br/>↓<br/>High</div> |
| 8. Quantification,<br>Mathematics                                                                                  | Comparative words<br>(e.g., "lots," "most," "all")                                                                                    | Whole numbers<br>Percents, fractions,<br>decimals                                                                     | Explication in terms of amounts, measures,<br>Simple mathematical constructs<br>(e.g., positive/negative integers, fractions, ratios)<br>Simple statistics (e.g., mean, median, mode,<br>frequency and distribution)                                                                              | Critical use of complex mathematical constructs<br>(e.g., complex numbers, roots, exponents, logs)<br>More complex statistics (e.g., standard<br>deviation, correlation, bias, measurement<br>error, representativeness, randomness)                                                                               |                                                                      |
| 9. Special Features                                                                                                | Games<br>Puzzles                                                                                                                      | Address/ZIP code impact mapping<br>Science experiments<br>Environmental projects                                      | Calculators<br>Career, scholarship,<br>internship information<br>Data bases                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                    |                                                                      |
| 10. Links to Other Sites                                                                                           | Limited number of links<br>Age-appropriate links                                                                                      |                                                                                                                       |                                                                                                                                                                                                                                                                                                   | Many links<br>Age-appropriate links                                                                                                                                                                                                                                                                                |                                                                      |
| 11. Topical Questions/<br>Subject Matter<br>Appropriateness (Review in<br>conjunction with content sophistication) |                                                                                                                                       | Recycling<br>Endangered species                                                                                       | Waste Management<br>Energy Conservation                                                                                                                                                                                                                                                           | Population Growth<br>Global Warming<br>Acid Rain<br>Ozone Depletion                                                                                                                                                                                                                                                |                                                                      |
| 12. Usability Features                                                                                             | Big icons<br>Clickable graphics<br>Minimal number of levels (to click through)<br>Minimal scrolling                                   |                                                                                                                       | Moderate scrolling<br>More levels (to click through)<br>Written navigational features                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                    |                                                                      |